

UNIT-3 (Data visualization & Matplotlib)
MCA - III Semester
Subject: Data Science & Analytics using Python
Unit-III Assignment

Date of Release: 12/11/2022

Last Date of Submission: 19/11/2022

Part-A

10X1=10

Q.1 (CO3) which library is the most used visualization library in python?

- (a) visual
- (b) matplotlib
- (c) matplotlib
- (d) matlab

Q.2 (CO3) recommended way to load matplotlib library is

- a) import matplotlib.pyplot as plt
- (b) import matplotlib.pyplot
- (c) import matplotlib as plt
- (d) import matplotlib

Q.3 (CO3) which function of matplotlib can be used to create a line chart?

- a) Line
- b) Plot
- c) Graph
- d) Bar

Q.4 (CO3) which function can be used to export generated graph in matplotlib to png

- a) savefigure
- b) savefig
- c) save
- d) export

Q.5 (CO3) which one of these is not a valid line style in matplotlib

- (a) '-'
- (b) '--'
- (c) '-.'
- (d) '<'

Q.6 (CO3) which graph should be used if we want to show distribution of elements?

- (a) pie
- (b) basemap
- (c) bar
- (d) histogram

Q.7 (CO3) which graph should be used If we want to find patterns in data?

- (a) bar
- (b) histogram
- (c) scatterplots
- (d) basemap

Q.8 (CO3) which method can be used to get the shortest path in networkx library

- (a) shortest_path
- (b) short_path
- (c) shortestPath
- (d) sortPath

Q.9 (CO3) which one of these is not a type of network graph

- (a) weighted graph
- (b) directed graph
- (c) undirected graph
- (d) circular graph

Q.10 (CO3) The plot method on Series and DataFrame is just a simple wrapper around _____

- a) gplt.plot()
- b) plt.plot()
- c) plt.plotgraph()
- d) none of the mentioned

Q.11 (CO3) Point out the correct combination with regards to kind keyword for graph plotting.

- a) 'hist' for histogram
- b) 'box' for boxplot
- c) 'area' for area plots
- d) all of the mentioned

Q.12 (CO3) Which of the following value is provided by kind keyword for barplot?

- a) bar
- b) kde
- c) hexbin
- d) none of the mentioned

Q.13 (CO3) You can create a scatter plot matrix using the _____ method in pandas.tools.plotting.

- a) sca_matrix
- b) scatter_matrix
- c) DataFrame.plot
- d) all of the mentioned

Q.14 (CO3) Point out the wrong combination with regards to kind keyword for graph plotting.

- a) 'scatter' for scatter plots
- b) 'kde' for hexagonal bin plots
- c) 'pie' for pie plots
- d) none of the mentioned

Q.15 (CO3). Which of the following plots are used to check if a data set or time series is random?

- a) Lag
- b) Random
- c) Lead
- d) None of the mentioned

Q.16 (CO3). Which of the following plots are often used for checking randomness in time series?

- a) Autocausation
- b) Autorank
- c) Autocorrelation
- d) None of the mentioned

Q.17 (CO3). _____ plots are used to visually assess the uncertainty of a statistic.

- a) Lag
- b) RadViz
- c) Bootstrap
- d) None of the mentioned

Q.18 (CO3) _____ plots are used to visually assess the uncertainty of a statistic.

- a) Lag
- b) RadViz
- c) Bootstrap
- d) None of the mentioned

Q.19 (CO3). _____ plots are used to visually assess the uncertainty of a statistic.

- a) Lag
- b) RadViz
- c) Bootstrap
- d) None of the mentioned

Q.20 (CO3). _____ plots are used to visually assess the uncertainty of a statistic.

- a) Lag
- b) RadViz
- c) Bootstrap
- d) None of the mentioned

Part-B

5X2=10

Q.1 (CO3) What is the concept of Data Visualization in Python?

Q.2 (CO3) What do you understand by need of Plotting graphs in Python?

Q.3 (CO3) Write the name of different types of Plots in matplotlib library of python?

Q.4(CO3) Write the statement for importing the matplotlib library in python?

Q.5 (CO3) What do you understand by Matplotlib library of python?

Part-C

5X6=30

Q.1 (CO3) Briefly enumerate the line properties with example in matplotlib using python.

Q.2 (CO3) Describe concept of Data Visualization with example.

Q.3 (CO3) What do you understand by Plot() function. Describe its functioning with the help of example.

Q.4.(CO3) Describe the concept of Pairplot using Seaborn Library of python.

Q.5.(CO3) What do you understand by SubPlot() function. Describe its functioning with the help of example

Part-D

2X10=20

Q.1 (CO3) Create a code in python using matplotlib library to draw a line from (1,3) to (2,8) , (6,1) and (8,10).

Q.2 (CO3) Create a code in python using matplotlib library to draw a Bar graph with labeling of both x-axis and y-axis , title of graph, different colors of each bars.